

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 55218 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Feb 21 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Star Slots	6
2.4	FID Slots	6
A	Summary	7
A.1	Status	7
A.2	Comments	7

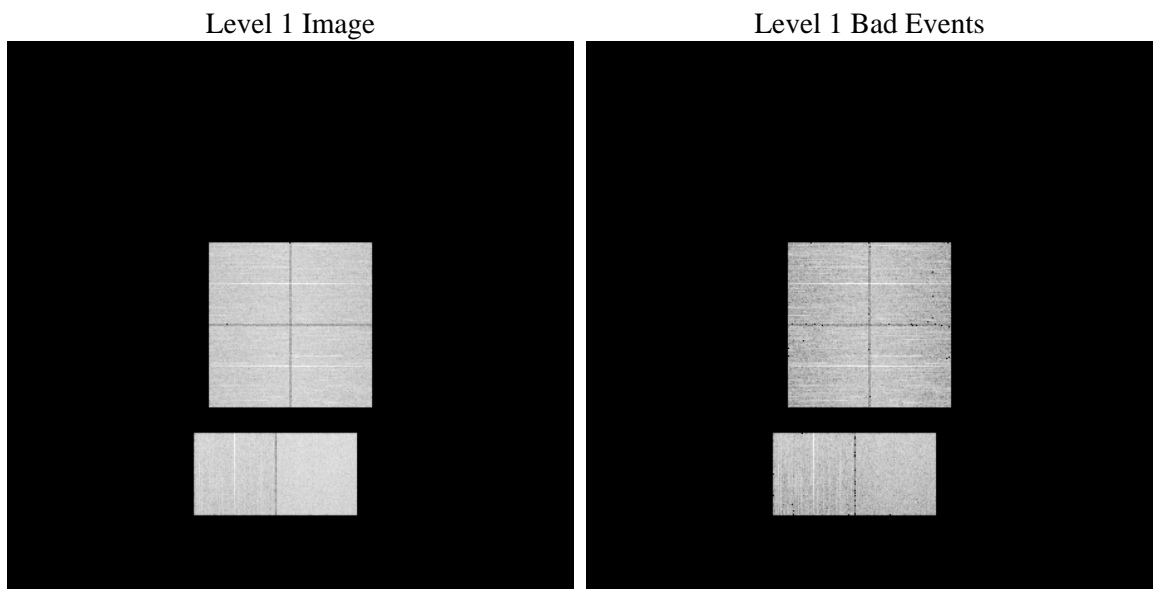
1 Front

seq_num	 	Sequence number
obs_id	55218	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	310.00203066517	Nominal RA [deg]
dec_nom	-0.027614134290076	Nominal Dec [deg]
roll_nom	248.47815731202	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8287.9999691844	Sum of GTIs [s]
livetime	8183.0523231401	Livetime [s]
ontime0	8287.9999691844	Sum of GTIs [s]
ontime1	8287.9999691844	Sum of GTIs [s]
ontime2	8287.9999691844	Sum of GTIs [s]
ontime3	8287.9999691844	Sum of GTIs [s]
ontime6	8287.9999691844	Sum of GTIs [s]
ontime7	8287.9999691844	Sum of GTIs [s]
l2events	301732	Number of level 2 events

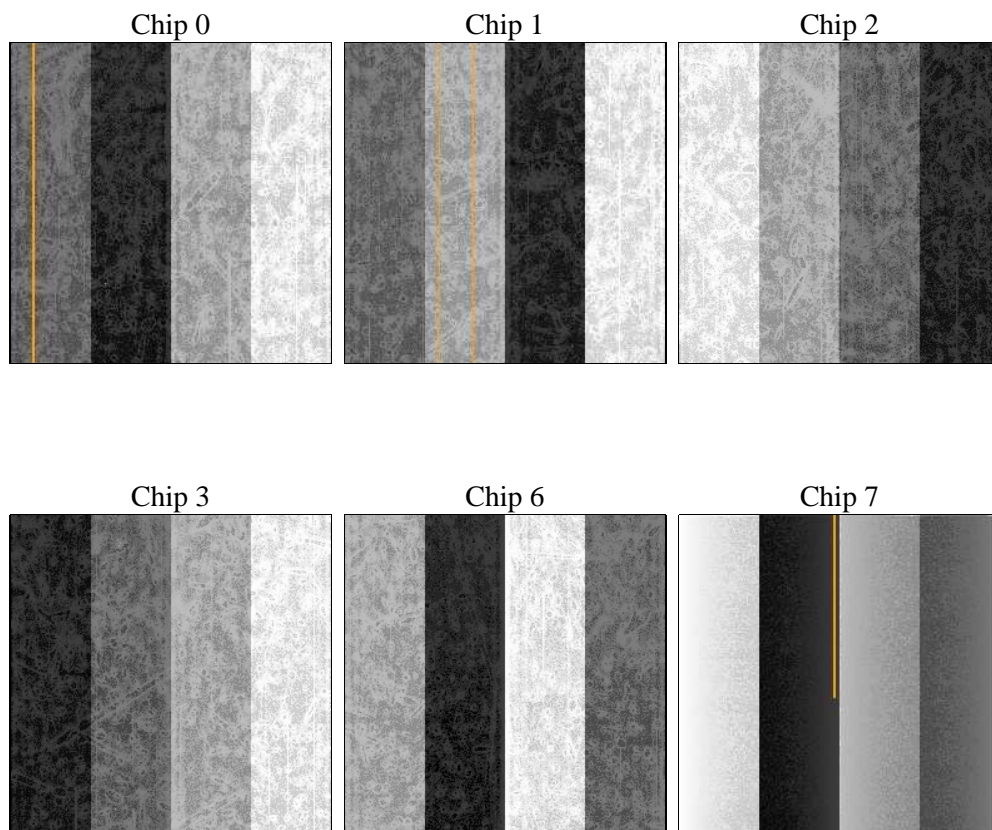
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	8287.9999691844	Sum of GTIs [s]
caldsver	4.4.8	 	ontime0	8287.9999691844	Sum of GTIs [s]
date	2012-02-21T14:54:22	Date and time of file creation	ontime1	8287.9999691844	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8287.9999691844	Sum of GTIs [s]
			ontime3	8287.9999691844	Sum of GTIs [s]
			ontime6	8287.9999691844	Sum of GTIs [s]
			ontime7	8287.9999691844	Sum of GTIs [s]
			l1events	644679	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	99464	98906	100553	104989	105501	135266	grade 0 events	25228	24600	25388	26106	25565	13509
rejected events	51710	50872	53088	56266	55846	57449		25%	24%	25%	24%	24%	9%
rejected %	51%	51%	52%	53%	52%	42%	grade 1 events	151	137	146	164	120	122
								0%	0%	0%	0%	0%	0%
							grade 2 events	8804	9276	8503	8598	9037	16818
								8%	9%	8%	8%	8%	12%
							grade 3 events	3230	3285	3158	3350	3343	7044
								3%	3%	3%	3%	3%	5%
							grade 4 events	3118	3134	3359	3336	3227	7014
								3%	3%	3%	3%	3%	5%
							grade 5 events	3308	3375	3115	3784	3689	9130
								3%	3%	3%	3%	3%	6%
							grade 6 events	7399	7765	7075	7351	8508	33462
								7%	7%	7%	7%	8%	24%
							grade 7 events	48226	47334	49809	52300	52012	48167
								48%	47%	49%	49%	49%	35%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	310.0020306651653	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-0.02761413429007617	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	248.478157312016	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	430887268.311424	430887267.28644			
Observation start date	2011-08-28T02:54:28	2011-08-28T02:54:27			
[s] Observation end time (MET)	430917458.663005	430917457.63803			
Observation end date	2011-08-28T11:17:39	2011-08-28T11:17:37			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2879999691844

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by chip coords:
(567,1),(585,1),(585,447),(567,447)